

WASHINGTON DEPARTMENT OF ECOLOGY
ENVIRONMENTAL ASSESSMENT PROGRAM
FRESHWATER MONITORING UNIT
STREAM DISCHARGE TECHNICAL NOTES
MANUAL STAGE HEIGHT STATION

STATION ID: 35P050

STATION NAME: George Creek @ Mouth

WATER YEAR: 2009

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Introduction

Watershed Description

George Creek is located in Asotin County in Southeast Washington. It flows northeast out of the Blue Mountains, beginning at an elevation of 5470 feet. The upper portion of the watershed is forested land. The lower to middle areas are used by ranchers primarily as rangeland.

Gage Location

The George Creek at Mouth station is located on private property off of Cloverland Road, 0.1 miles upstream from the confluence with Asotin Creek.
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Table 1.

Drainage Area (square miles)	128 (USGS)
Latitude (degrees, minutes, seconds)	46° 18' 0" N
Longitude (degrees, minutes, seconds)	117° 6' 0" W
Primary Gage Index Type	Staff
Secondary Gage Index Type	Tapedown

Error Analysis

Overall Rating Error Percentage	14.3
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Rating Table(s)

Table 2. Rating Table Summary

Rating Table No.	4	5	6
Period of Ratings	10/1/08 to 11/5/08	10/1/08 to 1/9/09	1/9/09 to 9/30/09
Range of Ratings (cfs)	0 to 121	0 to 121	0 to 145
No. of Defining Measurements	8	6	9
Rating Error (%)	13.5	16.7	13.6

Rating Table No.	7		
Period of Ratings	9/23/09 to 9/30/09		
Range of Ratings (cfs)	0.7 to 145		
No. of Defining Measurements	4		
Rating Error (%)	11.2		

Rating Table No.			
Period of Ratings			
Range of Ratings (cfs)			
No. of Defining Measurements			
Rating Error (%)			

Narrative

Ratings # 5 and #7 were a result of leaf litter build-up at the control. Rating 6 was a result of channel scour caused by a rain on snow precipitation event.

Seven discharge measurements were taken throughout the water year, ranging from 1.6 to 72 cfs.

Discrete Flow Record

Table 3. Discrete Flow Record Summary

Number of Discrete Stage Readings	25	
Maximum Observed Stage (feet) and Date	5.86	1/10/09
Maximum Predicted Discharge (cfs) and Date	112	1/10/09
Minimum Observed Stage (feet) and Date	4.18	9/29/09
Minimum Predicted Discharge (cfs) and Date	0.9	11/26/08 & 12/30/08
Range of Stage (feet) and Discharge (cfs)	1.68	111

Narrative

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Modeled Discharge

Table 4. Model Summary

Model Type (Slope conveyance, other, none)	n/a
Range of Modeled Stage (feet)	n/a
Range of Modeled Discharge (cfs)	n/a
Valid Period for Model	n/a
Model Confidence	n/a

Surveys

Table 5. Survey Type and Date (station, cross section, longitudinal)

Type	Date
n/a	n/a

Activities Completed

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